

REDUCED-ENERGY-CONSUMPTION ACTUATOR

Abstract

A valve system (10) includes a piezoelectric transducer (44) mounted on its housing (16). To change the valve's state, a microcontroller (54) causes a valve driver (58) to drive current through the actuator's coil (12) at a relatively high level. It continues driving current through the coil (12) at the high level until the transducer's output reaches a magnitude characteristic of the disturbance that typically results when the actuator's armature (22) reaches the end of its travel. At that point, the microcontroller (54) reduces coil drive.